

## National Garden Bureau's Annual of the Year 2015: Coleus



There is a wide range of cultivars of coleus.

### History

Coleus is thought to originate in Southeast Asia. While there is some debate as to when it arrived in Europe, Dutch botanist, Karl Ludwig Blume, is credited with naming and introducing the plant in mid 19th century England. This member of the mint family, with the traditional square stems and opposite leaves, comes in a wide range of foliage coloration, leaf texture and plant form. Considered an herbaceous perennial in its native range, coleus are used primarily as annuals by a wide range of the gardening public. Previously grouped into different species or classified as hybrids, coleus (formerly *Coleus blumei* and *Coleus hybridus*) were all placed under *Solenostemon scutellarioides* in 2006. As of 2012, taxonomic authorities consider the correct name for the coleus to be *Plectranthus scutellarioides*.



Coleus has alternate leaves in a wide range of foliage colors.



Coleus has been a garden staple since Victorian times.

Victorian gardeners utilized coleus in vivid bedding designs, also called "carpet gardening." These elaborate patterns were frequently designed to be viewed from above and coleus were a common component in these planting schemes. New introductions generated excitement during this period of history and "coleus fever" was rampant for a time. Because coleus mutate frequently, sports and reversions were not uncommon and could result in a new variety of interest. Sports are seen as naturally occurring genetic mutations while reversions represent the appearance of the plant at some point in its "genetic past." Coleus popularity seemed to dwindle in the early 20<sup>th</sup> century and didn't see much of a resurgence of use until the mid 20<sup>th</sup> century when uniform, seed grown varieties became more popular and coleus also found some popularity as a houseplant. In the 1980s, as more gardeners realized the full potential of this spectacular plant, the



Coleus 'Defiance'



**Coleus 'Wizard Chocolate'**

coleus boom was reinitiated and the past two decades have seen an amazing number of introductions in both seed and vegetative offerings. Many of the best selections have been preserved by coleus collectors and enthusiasts over the years but there is no shortage of new varieties being selected and promoted each year.

While modern coleus breeding still focuses on new selections for the home gardener featuring new color combinations and foliage characteristics, other features of consideration have become more prominent. There is certainly a focus on breeding and trialing for more sun tolerance which will expand the use of coleus to the brighter portions of our gardens. For sunny areas consider these varieties: any of the Stained Glassworks varieties, the Wizard, Versa and Marquee series, or any variety with the word sun in its name. Breeding efforts also focus on delayed flowering, more prolific branching and certainly an emphasis on more compact and trailing forms, like Lava Rose, for containers and other tight spots in the garden beyond the traditional bedding scheme.

### **Coleus Basics**

The primary ornamental feature of coleus is the foliage which can be represented by green, pink, yellow, orange, red, dark maroon (near black), brown, cream and white. The range of shades for these colors and the possible combinations is seemingly limitless. This plethora of colors and combinations lends itself to the other common names for coleus of painted nettle or flame nettle. While some gardeners will leave the small flowers, it's recommended that you pinch these off and back to a leaf node to encourage more energy into stem and foliage growth and not flowering. Coleus left to flower may lose vigor as the plant puts energy into seed production.



**It's best to pinch off flowers to direct the plant's energy into growing more leaves.**



**Coleus 'Rustic Orange'**

The variability in patterns, some subtle and some more dramatic, is truly amazing. While some selections will exhibit a solid color, other varieties may feature splashes, blotches, streaks, flecks, margins and veins. Color intensity may be affected by sunlight, heat sensitivity and other conditions. Bright sunlight can create a saturation of color and the difference in appearance for most varieties in part shade versus full sun is noticeable. The term "sun coleus" refers to selections that have been observed to tolerate more direct sunlight although moisture considerations become even more important in those locations. Darker cultivars tend to tolerate more sun

with the lighter varieties benefitting from some degree of shade to minimize leaf scorching. Morning sun and dappled afternoon shade tends to maintain consistent foliage coloration. The underside of the



**Coleus 'Stained Glass'**

leaf may also feature an alternate color that can be a contributing factor visually as well. Optimum growing conditions are covered later in this article but consider that too little light will encourage a weak-stemmed, less vigorous plant without optimal coloration.

Leaf texture for coleus can be quite variable with foliage that may include the features of being large, small, twisted, elongated, scalloped, lobed, finger-like, “duck’s foot” (webbed feet), etc. This overall foliage shape, affected by these other features, can be quite ornamental and add to the effect of the plant in combination with the coloration. Leaf texture for coleus should be a serious consideration when selecting and using coleus as the visual contribution is significant.

The wide range of coleus can be grouped into three basic plant forms including upright, rounded and prostrate/trailing. Frequent snipping, pinching and trimming can help modify form although mature size will also vary depending on growing conditions and other factors. The trailing forms may also be considered semi-trailing and have value at the edge of container or in a hanging basket. Trailing forms may also be effective as weaving groundcovers and will become a colorful, “living mulch” that not only adds interest but helps shade the soil for moisture retention and discourage weeds.



**Coleus Under the Sea® ‘Bone Fish’**

In terms of selecting a variety, there are many to choose from and desired features will certainly include foliage coloration but leaf texture and plant form may also be of interest. Please refer to the picturesque slide show at [http://ngb.org/year\\_of/index.cfm](http://ngb.org/year_of/index.cfm) to see a database of some of the more commonly grown varieties. While this list is not comprehensive, NGB Members are an excellent source for information regarding current coleus breeding efforts and currently available varieties.

### **Planting & Proper Care**

Coleus has long been considered a shade plant but, as was mentioned earlier, they thrive in part shade and dappled shade and will languish in deep shade. In fact, their best leaf coloration is achieved with morning sun and some degree of afternoon shade. Many varieties do well in both shade and part sun, such as the ColorBlaze, Fairway, Superfine Rainbow, Main Street and Kong series. Some varieties can take quite a bit of sun and are quite adaptable as long as they are not allowed to dry out. The color change can also be affected by temperature, available sunlight, soil fertility, etc. Coleus are quite tolerant of a wide range of soil conditions and will do well in even average conditions. Coleus enjoy the heat and languish below 55 degrees F. Cold, overly damp soils can result in leaf drop and may encourage disease problems. However, extreme temperatures over 95 degrees F are also undesirable. Plant coleus after any danger of frost has passed when soil temperatures have warmed sufficiently and evening temperatures are above 60 degrees F. Avoiding too wet or too dry conditions is warranted and coleus are quite pH tolerant except for the extremes of a significantly low (or high) pH. Light fertilization is recommended, particularly in containers.



**Plant coleus after all danger of frost has passed.**

To maintain plant form, pinch back most varieties every few weeks to prevent flower formation. This directs the plant to put energy into additional branching and foliage creation instead of flowering, thereby creating a fuller plant. When pinching off flowers, do so throughout the entire summer to create a full,

lush plant. Pinch just above a set of leaves or branching junction for the best appearance (don't leave a stub!).

## Getting Started

Raising coleus from seeds is relatively easy. Seed strains offer uniformity and may include mixes or consistent coloration with identical plants. Seed packets can be quite affordable and a wide range of coleus varieties available from seed vendors. Keeping in mind that coleus should not be planted out in the garden until all danger of frost is past, timing of seed sowing should be 8-12 weeks before the last frost date. Sowing seeds in at least three inches of growing medium (maintain at 70 degrees F) is recommended and seeds should be sown on the surface as they require light to germinate. Well-timed, even watering, misting (for humidity) and frequent observation are also encouraged. Coleus seeds have a high germination and you should have plenty of seedlings to transition to larger packs and containers. Consult additional references for more specific details on starting your coleus from seeds.



Raising coleus from seed is easy.

Propagating coleus from either stem cuttings or seeds is quite easy. Snipping a small, 2" length of coleus and putting it in a rooting medium or even in water will start the process of new roots being developed. Selecting healthy cuttings with at least one or two leaf nodes is vital and you should also remove the growing tip when first placing the sample in water or your rooting medium. Rooting hormone can be used but is not necessary and your new cuttings do not require fertilizer during establishment prior to planting in a container or out in the garden. Any cuttings grown in water can be transitioned to a rooting medium if desired. Keep new cuttings moist and maintain high humidity with misting. Bright, indirect light is recommended during the initial establishment of fresh cuttings. Keep cuttings warm and observe them frequently. The basic principles of creating new plants by cuttings are easy to follow and readily found in many references.



Coleus 'Dipt in Wine'



Coleus 'Florida Sun Jade'

Overwintering coleus plants and cuttings is certainly possible. Bringing coleus inside for overwintering as houseplants is one option although temperatures near 70 degrees F continue to be ideal. Rotate plants and pinch back as needed to maintain form. Consider grow lights as an option to provide adequate winter lighting conditions. Cuttings taken in the fall and processed as mentioned above are another option but will require the same temperature, bright, indirect light and additional humidity by frequent misting.

When selecting plants from retail garden centers, read the plant tag for information regarding overall size, habit (i.e. mounded, trailing, etc.) and other features. With such a wide range of available varieties, additional research regarding a specific variety may be warranted prior to purchase. Do consider all the appropriate steps for proper establishment as it relates to planting time, preferred location, moisture availability, fertilization, etc.

## Designing With Coleus

Colorful coleus will have immediate and dramatic impact in the garden if kept happy and healthy. Consider the merits of each variety as it relates to foliage color, leaf texture, plant form and of course, what sort of neighboring plants will be involved. There should be some consideration to selection, landscape function, proper placement and proactive site preparation prior to installation and usage. Solid color coleus varieties such as Redhead and Lime Delight Premium Sun (both bred for the sun) can be very impactful and make a statement in the mixed border while those with variable coloration may become “color echoes” for neighboring plants with similar (or contrasting) flower and/or foliage colors. The repetition of certain coleus colors and form can lend unity and harmony in the garden. While a solitary specimen can add a “punch” of color, consider the impact of mass planting as well. While coleus can do well as “role players” they can also be elite members of your “leading cast”. Foliage with lighter coloration can provide illumination in shadier locations while dark colors (for example, any coleus with Chocolate its name) in the same setting will create depth and contrast. Consider coleus just one of many available tools in your gardening “toolbox.” Keep in mind that the wide range of leaf textures available, independent of color should also be considered a potential ornamental asset as should plant form.



**Use coleus to echo or contrast colors with other plants or flowers.**

## Coleus in Containers



**Coleus grows well in containers.**

All coleus selections have excellent container potential if they are given an adequate volume of well-draining soil mix, reasonable nutrients and the proper sun exposure to thrive. Avoid windy locations as coleus can be prone to breakage in extreme winds. Slow release fertilizers with a balanced mix of nutrients are recommended for your containers although half strength liquid fertilizer applied every 2 weeks over the growing season should be sufficient. Coleus do not show their best coloration if over fertilized so be conservative and consistent. You may want to consider water retention additives to help alleviate some watering needs, particularly in sunny locations. Keep in mind that poor garden soils might necessitate an elevated container or raised bed to provide sufficient conditions for coleus to not just survive, but thrive! Container size is a factor as the volume of soil should accommodate substantial rooting by coleus and any other plants that are involved in the design. Drainage is vital so consider adding additional drainage holes as needed. The container style, color and ultimate placement should also be considered in advance. Coleus filled containers, if moveable, allow for instant color as they can be positioned as needed and used to add color, provide immediate interest and accent areas of the garden, deck or patio.



**Coleus in containers are easy moved to provide instant color wherever needed.**

Coleus certainly has the potential to be included in hanging basket arrangements. The distinctive form of many varieties might be best featured in a “cascading situation.” Some of the trailing selections are



**Coleus 'Happy Line'**

coleus plant is the best defense against these challenges. Slugs, snails, spider mites, mealybugs, whiteflies and occasionally aphids may be challenges under certain conditions. Positive identification of these pests is the first step in proper selection of a treatment program. Consider additional consultation with experts, your local Extension program or other resources when deciding upon a course of action. While there are few fungi, bacteria and viruses that affect coleus, there may be occasional issues of stem rot, root rot or downy mildew which all have a direct relationship to moisture inputs and associated growing conditions. Relocating the plant, pinching healthy cuttings for re-establishment or removing the plant might be options to consider after appropriate research and consultation. Healthy, young plants will frequently outgrow some



**Many types of coleus are available.**

ideal candidates for the edge of an elevated container while larger varieties can be utilized for a strong foliage contribution in the center of the basket. Consider watering needs as coleus are naturally thirsty and a hanging basket can be one of the most challenging situations in terms of moisture retention and associated watering needs. Wind protection is also warranted.

### **Coleus Problems**

As mentioned previously, coleus may become stressed by lack of heat and are certainly affected by available moisture. Excessive or inadequate moisture availability, while affecting vigor and appearance, may also lead to other challenges with insects or diseases. A healthy



**Coleus is susceptible to mealybugs.**

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### **In Summary**

The consideration of easy-to-grow coleus in the landscape is prudent for all gardeners as they consider the potential merits of this plant in the mixed border and container. Low-maintenance coleus can make impactful statements in the garden and the wide range of available selections assures a promising future for this popular plant during the 2015 — Year of the Coleus and well beyond!

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– Text reprinted from a National Garden Bureau Fact Sheet by Mark Dwyer of Rotary Botanical Gardens on the NGB website at [ngb.org/year\\_of/index.cfm?YOID=39](http://ngb.org/year_of/index.cfm?YOID=39).

### **Additional Information:**

- 2015 National Garden Bureau Year of the Coleus – slide show of selected cultivars in alphabetical order at [www.slideshare.net/NationalGardenBureau/2015-national-garden-bureaus-year-of-the-coleus?related=1](http://www.slideshare.net/NationalGardenBureau/2015-national-garden-bureaus-year-of-the-coleus?related=1)
- *Solenostemon scutellarioides* – on the Missouri Botanic Garden’s Kemper Center for Home Gardening website at [www.missouribotanicalgarden.org/PlantFinder/PlantFinderDetails.aspx?taxonid=281537](http://www.missouribotanicalgarden.org/PlantFinder/PlantFinderDetails.aspx?taxonid=281537)
- *Coleus x hybridus* – on the Floridata website at [www.floridata.com/Plants/Lamiaceae/Coleus%20x%20hybridus/530](http://www.floridata.com/Plants/Lamiaceae/Coleus%20x%20hybridus/530)
- Growing Coleus – part of episode 1503 (July 25, 2007) of *The Wisconsin Gardener* at [wpt.org/Wisconsin-Gardener/Segments/growing-coleus](http://wpt.org/Wisconsin-Gardener/Segments/growing-coleus)